November 21, 2001

Mr. Thomas J. Sugrue
Chief, Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, SW
Washington, DC 20554

Re: Eliminating CMRS-Public Safety Interference in the 800 MHz Band and Allocating Additional Spectrum to Meet Critical Public Safety Communications Needs

Dear Mr. Sugrue:

Nextel Communications, Inc. ("Nextel") hereby submits the attached White Paper, "Promoting Public Safety Communications: Realigning the 800 MHz Land Mobile Radio Band to Rectify Commercial Mobile Radio – Public Safety Interference and Allocate Additional Spectrum to Meet Critical Public Safety Needs." The White Paper recommends that the Federal Communications Commission (the "Commission") initiate expeditiously a rulemaking proceeding to accomplish two pressing public interest goals: (1) making additional spectrum available for public safety communications services; and (2) substantially reducing interference to public safety communications from the operations of Commercial Mobile Radio Service ("CMRS") systems in the 800 MHz band.

Nextel shares the 800 MHz band with Public Safety communications systems, Business/Industrial Land Transportation ("B/ILT") licensees, Specialized Mobile Radio ("SMR") operators and Cellular Radiotelephone ("cellular") systems. Cellular licensees occupy the upper portion of the 800 MHz band directly adjacent to public safety communications systems. Nextel, other SMRs, B/ILT, and Public Safety systems are licensed in the 36 MHz of Land Mobile Radio spectrum at 800 MHz adjacent to the cellular licensees. Nextel is the leading commercial licensee in the Land Mobile Radio band with licenses for more than 18 MHz of this spectrum.

Over the past two years, Nextel has worked with the public safety community to identify why CMRS operations are interfering with public safety communications systems in the 800 MHz band, even though all licensees are in compliance with the Commission's rules and the terms and conditions of their licenses. Typically, interference occurs in the immediate vicinity of CMRS base stations operated by either

the cellular licensees or advanced SMRs using digital, cellular-like network architecture. Public safety communications operators in about 25 metropolitan areas have experienced this type of interference, often near multiple CMRS base stations. Interference can disrupt critical life safety communications with police officers, firefighters, rescue teams and other emergency response personnel, potentially putting them at risk as well as the public they serve. Mitigating these risks is essential and has become even more urgent in the aftermath of the September 11, 2001 terrorist attacks on our country.

Last January, Nextel and the Association of Public Safety Communications Officials, Motorola, Inc., the Cellular Telecommunications and Internet Association and the Public Safety Wireless Network presented to the Commission a "Best Practices Guide" that identified the causes of CMRS – public safety interference and presented both mitigation alternatives and prior coordination plans to prevent interference. As discussed therein, the fundamental cause of this interference is an 800 MHz spectrum allocation plan, initially adopted in 1974, that has failed to keep pace with the dynamic nature of the wireless telecommunications marketplace. It results in the Commission authorizing public safety communications providers and CMRS licensees to operate essentially incompatible systems on mixed, interleaved and adjacent 800 MHz channels. The locally stronger transmissions of CMRS systems "overpower" less robust, distant public safety signals -- a signal strength disparity that under certain circumstances causes interference in the front end of public safety receivers. Intermodulation is the dominant cause of interference, with wideband noise and receiver overload playing a secondary role.

Nextel has devoted substantial resources to identifying the causes of CMRS – public safety interference and developing both immediate and long-term corrective measures. This White Paper urges the Commission to implement an effective, long-term solution: an 800 MHz spectrum realignment to relocate public safety and CMRS systems to separate spectrum blocks, thereby eliminating the mixed licensing of incompatible system designs that is the underlying cause of CMRS – public safety interference. It would establish a 20 MHz spectrum block for public safety communications – more than doubling the current public safety allocation of 9.5 MHz at 800 MHz -- and a separate 16 MHz spectrum block dedicated to advanced, frequency reuse digital SMR networks. The proposed public safety channel block would be adjacent to television channels 68 and 69, which have already been allocated for use by public safety communications systems, ultimately creating a near-contiguous 44 MHz channel block dedicated to public safety communications uses. B/ILT licensees currently operating on the new public safety block would become secondary and would be permitted to relocate to spectrum in the 700 MHz and 900 MHz bands on a voluntary first-come, first-served basis.

To implement the proposed band plan, Nextel would swap 16 MHz of spectrum it currently holds in the 700, 800, and 900 MHz bands; 8 MHz of this spectrum is in the 800 MHz band and would be reallocated to the new public safety spectrum block, while

the other 8 MHz of spectrum is in the 700 and 900 MHz bands and would be used to relocate B/ILT licensees and high site SMR licensees currently operating in the 800 MHz band. In exchange, the Commission would grant Nextel licenses for 6 MHz of replacement spectrum in the new digital SMR channel block at 800 MHz (contiguous to the 10 MHz already licensed to Nextel in this block), and 10 MHz of unused contiguous spectrum reallocated for terrestrial commercial use in the 2 GHz Mobile Satellite Service ("MSS") band. No incumbent licensee would lose any spectrum, and public safety operators would obtain additional, critically needed spectrum for increased capacity, advanced services and enhanced interoperability.

Nextel is willing to contribute up to $500 million to help fund the costs of relocating incumbent 800 MHz public safety systems in accordance with the realigned band plan. It would also fund its own significant relocation requirements. Nextel would provide these funds contingent upon: (1) the FCC's adoption of the proposed realignment plan by a Final Order; and (2) the assignment to Nextel of licenses for 6 MHz in the new 800 MHz digital SMR band (in addition to the licenses Nextel currently holds in that band) and for the 10 MHz, 2020/2025 – 2170/2175, from the MSS band in exchange for the 16 MHz of spectrum Nextel would surrender as part of the plan. The cellular operators, and all other CMRS licensees that will benefit from the proposed realignment, should contribute substantially to the costs of relocating public safety licensees.

The White Paper proposal will help police, firefighters, and other public safety agencies meet the unprecedented challenges they now face in protecting our nation's security, while enhancing the spectral operating environment for public safety and CMRS licensees. The Commission should expeditiously commence a rulemaking proceeding to advance these vital public interest measures.

Respectfully submitted,

NEXTEL COMMUNICATIONS, INC.

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Enclosure